

Abstract

Vertical holes are created in streets separating individual integrated circuit (IC) dies formed on a semiconductor wafer, the holes spanning saw-lines along which the wafer is to be later cut to separate the IC die from one another to form individual IC chips. The holes are then filled with conductive material. After the wafer is cut along the saw-lines, portions of the conductive material on opposing sides of the saw-lines remain on peripheral edges of the IC chip to form signal paths between the upper and lower surfaces of the IC chips.

000001.02201